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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/848,882	05/04/2001		Geert Arnout Awater	6-14	8357
22186	7590	09/29/2004		EXAM	INER
MENDELS	OHN AN	ID ASSOCIATES	WILLIAMS, LAWRENCE B		
1515 MARKET STREET				ART UNIT	
SUITE 715				ARTONII	PAPER NUMBER
PHILADELF	HIA. PA	19102	2634		

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)
Office Audio O	09/848,882	AWATER ET AL.
Office Action Summary	Examiner	Art Unit
	Lawrence B Williams	2634
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with ti	ne correspondence address
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply to ly within the statutory minimum of thirty (30 will apply and will expire SIX (6) MONTHS e, cause the application to become ABAND	be timely filed) days will be considered timely. from the mailing date of this communication. ONED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on <u>04 №</u> This action is FINAL . 2b) This Since this application is in condition for allowed closed in accordance with the practice under the practice.	s action is non-final. ance except for formal matters,	
Disposition of Claims		
4) ⊠ Claim(s) 1-8 is/are pending in the application. 4a) Of the above claim(s) is/are withdra 5) □ Claim(s) is/are allowed. 6) ⊠ Claim(s) 1 and 2 is/are rejected. 7) ⊠ Claim(s) 3-8 is/are objected to. 8) □ Claim(s) are subject to restriction and/o	own from consideration. or election requirement.	
 9)⊠ The specification is objected to by the Examination 10)⊠ The drawing(s) filed on <u>04 May 2001</u> is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction 11)□ The oath or declaration is objected to by the Examination) accepted or b) objected or b) obj	See 37 CFR 1.85(a). s objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat* See the attached detailed Office action for a list	its have been received. Its have been received in Application of the property documents have been received (PCT Rule 17.2(a)).	cation No eived in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Ma	nary (PTO-413) ail Date
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 1.	5) Notice of Inform 6) Other:	nal Patent Application (PTO-152)

DETAILED ACTION

Drawings

- 1. The drawings are objected to because:
- a.) In Fig. 1, the items contained (22.1, 18.1, 10.1, etc.) need to contain a text label. It is office policy to request from applicants that submitted figures contain both text and numerical labels to allow individuals viewing each figure to be able to determine the designation of each element in the figure without having to go into the specifications.
- b.) In Figs. 2-4, examiner suggests applicant label element 30, "transformation block" as referenced in specification.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: T_{im}(i=1,2...N).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any

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required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Specification

- 3. The abstract of the disclosure is objected to because:
- a.) Examiner suggests applicant rewrite and form one paragraph. Correction is required. See MPEP § 608.01(b).
- 4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a **single paragraph** on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

- 5. The disclosure is objected to because of the following informalities:
 - a.) Examiner suggests applicant insert a comma after phase-modulation in line 12 of page

2.

b.) Examiner suggests applicant rewrite lines 4-5, beginning with "such that for ... other" for clarification.

Appropriate correction is required.

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Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 7. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Dent (U. S. Patent 5,790,606).
- (1) With regard to claim 1, Dent discloses in Fig. 1 and Fig. 7, a wireless radio frequency data communication system comprising: a base-station comprising a multiple of N first groups (B₁-B₅) and a signal processing-unit (11) comprising memory means (Fig. 7, 100, 160) and processing means, wherein each first group comprises a receiver-unit provided with a receiver and at least one antenna which is connected to the receiver-unit, wherein the signal processingunit is connected with each of the first groups for processing receive-signals generated by each of the first groups, and a multiple of M second groups (M_1-M_2) for transmitting radio frequency signals to the first groups, wherein each second group comprises a transmitter-unit provided with a transmitter and at least one antenna which is connected to the transmitter unit (col. 3, lines 27-45), wherein the memory means (Fig. 7) of the signal processing-unit are provided with means comprising information about the transfer-functions of radio frequency signals from each of the antennas of the second groups to each of the antennas of the first groups (col. 7, lines 5-23), and wherein the transmitters and receivers operate on essentially the same radio frequency or radio frequency-band (claim 1), characterized in that, the signal processing-unit is arranged to process, in use, the receive-signals on the basis of the Maximum Likelihood Detection method (col. 7,

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lines 23-50), such that for each second group of the second groups an individual communication channel is formed with the base-station wherein these communication channels are generated simultaneously and separately from each other (col. 6, line 57-col. 7, line 23).

(2) With regard to claim 2, Dent also discloses a wireless radio frequency data communication system characterized in that, each transmitter comprises means for modulating an information signal on a radio frequency signal according to the Quadrature Amplitude Modulation (QAM) method, wherein so-called QAM-symbols are transmitted (col. 19, lines 32-46) and that each receiver comprises means for demodulating information signals from a received radio frequency signal.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claim 1 is provisionally rejected under the judicially created doctrine of double patenting over claim 1 of copending Application No. 09/849,089. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

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The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: Both claims disclose a wireless radio frequency system comprising a base-station comprising multiple first "groups" or "sets" and a multiple second group" or "set". Applicant's only distinction in the claim of US Patent Application 09/849,089 is that now both groups or sets now include a "transmitter-and receiver-unit" instead of a receiver-unit and transmitter-unit, respectively. One skilled in the art would surely have knowledge of the use of transceiver devices in today's communication field, so their use would be obvious in the claimed invention of the present application.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Allowable Subject Matter

10. Claims 3-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

11. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Lawrence B Williams whose telephone number is 571-272-3037.

The examiner can normally be reached on Monday-Friday (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw

September 16, 2004

STEPHEN CHIN

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SUPERVISORY PATENT EXAMINE

TECHNOLOGY CENTER 2600